

Clean form:

Profiling execution of a computer program. The program is coded in a mode-dependent instruction set. During a profile-quiescent execution interval, the profile circuitry records no profile information. After a triggering event is detected, the profile circuitry commences a profiled execution interval, and records profile information describing every profileable event during that interval. The profiled information includes at least all divergence of execution from sequential execution and processor mode changes not inferable from instruction opcode. The recorded profile information is efficiently tailored to annotate the profiled binary code with sufficient processor mode information to resolve mode-dependency, and indicates contiguous ranges of sequential instructions executed during a profiled interval by low and high boundaries of the contiguous ranges, indicating the high boundary by the address of the last byte. The profile information identifies each distinct physical page of instruction text executed during the interval.